UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P O Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/573,418	03/27/2006	Takeshi Iwatsu	286664US6PCT	2799

22859   7590   12/04/2008
OBLON, SPIVAK, MCCLELLAND MAIER & NEUSTADT, P.C.
1940 DUKE STREET
ALEXANDRIA, VA 22314

EXAMINER
TRUONG, DENNIS

ART UNIT	PAPER NUMBER
2169	

NOTIFICATION DATE	DELIVERY MODE
12/04/2008	ELECTRONIC

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

patentdocket@oblon.com
oblonpat@oblon.com
jgardner@oblon.com

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
  Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *24 September 2008*.

2a)☐ This action is FINAL.　　2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-14* is/are pending in the application.

　　4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-14* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on *27 March 2006* is/are: a)☒ accepted or b)☐ objected to by the Examiner.

　　Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

　　Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

　　a)☒ All　b)☐ Some * c)☐ None of:

　　　　1.☒ Certified copies of the priority documents have been received.

　　　　2.☐ Certified copies of the priority documents have been received in Application No. _____.

　　　　3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

　　* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☐ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO/SB/08)　Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)　Paper No(s)/Mail Date. _____

5)☐ Notice of Informal Patent Application

6)☐ Other: _____.

DETAILED ACTION

1.   A request for continued examination under 37 CFR 1.114, including the fee set forth in

37 CFR 1.17(e), was filed in this application after final rejection. Since this application is

eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e)

has been timely paid, the finality of the previous Office action has been withdrawn pursuant to

37 CFR 1.114. Applicant's submission filed on 9/24/2008 has been entered.

Response to Amendment

2.   It is acknowledged that claims 1 and 12-14 have been amended.

3.   Claims 1-14 are pending.

Response to Arguments

4.   On page 8 of Applicant's Remarks, Applicant indicates that the "computer-readable

medium" is described at least on page 20 of the specifications as "a magnetic storage device,

optical disc, magnetic optical storage medium, semiconductor memory or the like." Which

provides proper definition that places the claim within one statutory class of invention, therefore

the rejection of claim 13 under 35 USC 101, and the objection to the specifications are

withdrawn.

5.   Applicant's arguments with respect to claims 1 have been fully considered but are not

persuasive. On page 9 Applicant argues that Craig fails to teach means for storing without

inquiry via the network when the content data is stored in the means for storing, and the

controlling the means for receiving to receive the content data from the external apparatus via the

network when the content data is not stored in the means for storing.   Examiner respectfully

submits that Fig. 3 discloses a set top box consisting a cache manager 166 interfaced with the

cache 164, and Fig. 4A and col. 4 lines 10-47 discloses managing the cache 164 using the cache

manage 166. In col. 4 lines 27-30 Craig discloses "If the web page exists in the cache 164,

control continues with step 212. Control outputs the web page to the display 30 and continues

with step 204." Where if the page is in the cache, (the cache is claimed means for storing) the

page is retrieved and displayed from the cache which is local at the set top box therefore an

inquiry via the network is not necessary. Furthermore in col. 4 lines 32-37 Craig discloses "if the

web page is not dynamically generated and the web page does not exist in cache, control

continues from step 208 to step 216. In step 216, control retrieves the requested web page from

the web server 14 using the URL." Where if the page does not exit in the cache, (the cache is

claimed means for storing) the page is retrieved from the web server using the URL with is the

external apparatus via the network claimed.

Claim Rejections - 35 USC § 101

6.   35 U.S.C. 101 reads as follows:

> Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or
> any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and
> requirements of this title.

7.   Claim 1-11 refers to "an information processing apparatus" but fails to specifically

disclose to be a part of a physical device (such as consisting of a processor or physical memory)

and to one of ordinary skill can be implemented as software routines. Claim 1 refers to "means

for transmitting, receiving, storing, outputting, detecting, and claim 10 refers to "reproduction

unit" all of which fails to specifically disclose to be a part of a physical device. Therefore

renders the system at most software per se, failing to fall within a statutory category.

Accordingly the claims lack the necessary physical articles or objects to constitute a

machine or a manufacture within the meaning of 35 USC 101. They are clearly not a series of

steps or acts to be a process nor are they a combination of chemical compounds to be a

composition of matter. As such, they fail to fall within a statutory category. They are, at best,

functional descriptive material *per se*.

Descriptive material can be characterized as either "functional descriptive material" or

"nonfunctional descriptive material." Both types of "descriptive material" are nonstatutory when

claimed as descriptive material *per se*, 33 F.3d at 1360, 31 USPQ2d at 1759. When <u>functional</u>

descriptive material is recorded on some computer-readable medium, it becomes structurally and

functionally interrelated to the medium and will be statutory in most cases since use of

technology permits the function of the descriptive material to be realized. Compare *In re Lowry*,

32 F.3d 1579, 1583-84, 32 USPQ2d 1031, 1035 (Fed. Cir. 1994)

Merely claiming <u>non</u>functional descriptive material, i.e., abstract ideas, stored on a

computer-readable medium, in a computer, or on an electromagnetic carrier signal, do not make

it statutory. See *Diehr*, 450 U.S. at 185-86, 209 USPQ at 8 (noting that the claims for an

algorithm in *Benson* were unpatentable as abstract ideas because "[t]he sole practical application

of the algorithm was in connection with the programming of a general purpose computer.").

Claim Rejections - 35 USC § 102

8.　　　　The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the

basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed
> in the United States before the invention by the applicant for patent or (2) a patent granted on an application for
> patent by another filed in the United States before the invention by the applicant for patent, except that an
> international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this
> subsection of an application filed in the United States only if the international application designated the United
> States and was published under Article 21(2) of such treaty in the English language.

9.   **Claims 1, 2, 11-14** rejected under 35 U.S.C. 102(e) as being anticipated by **Craig et al.**

(US 6757708 B1) (herein referenced as **Craig**).

As per claim 1, Craig discloses:

- **means for transmitting a request for a page information to said external apparatus**,

  at least by (col. 11 lines 16-17, Fig. 4) "A request 405 for dynamic generated content is

  received at Web server 410", where the request and receiving of the content is

  transmitting, and the web server is the external apparatus.

- **means for receiving said page information, wherein the page information includes**

  an identification information corresponding to a content data, and receiving said

  content data corresponding to said identification information included in said page

  information, at least by (col. 11 lines 17-21) where it is disclosed that the received

  request via HTTP is forwarded to a web application server that supports JSPs and

  servlets, then the "request is then passed to a servlet 420 corresponding to the invoked

  JSP, where this servlet 420 uses a bean 425". It is known in the art and further disclosed

  in (col. 12-13) that beans refers to the dynamic content that is generated and the status of

  the beans by the methods defined within the bean so the disclosed bean and the methods

  related to versions ("serialVersionUID") and cashed information ("amICached") bean

  etc., are the identification information corresponding to the content data.

- **means for storing said content data received by said means for receiving, based on**

  said identification information independently of said page information, at least by

  (fig. 6-9) discloses the process of caching based on the condition of the bean and whether

  it has been cached or out of date. This is done independently of the page information

because the "executed methods" pertaining to the identification information are defined

within the bean.

-   **means for outputting the said content data along with said page information**, at least

    by (Fig. 3A ref. 310b, col. 9 lines 38-40) "FIG. 3B shows that the JSP 355 sets and gets

    360, 361 information from each bean 365, 366, where this information may be a result of

    the bean retrieving 370, 371 information from the data store 375, 376. Once the

    dynamically generated response is complete, it is returned 310b from the JSP 355 to the

    browser 305."

-   **means for detecting whether said content data corresponding to said identification**

    information acquisition request is stored in said means for storing, at least by (Fig. 6

    ref 600), **and for controlling said means for outputting to output said content data**

    stored by said means for storing without inquiry via the network when said content

    data is stored in said means for storing, at least by (col. 4 lines 27-30) Craig discloses

    "If the web page exists in the cache 164, control continues with step 212. Control outputs

    the web page to the display 30 and continues with step 204." Where if the page is in the

    cache, (the cache is claimed means for storing) the page is retrieved and displayed from

    the cache which is local at the set top box therefore an inquiry via the network is not

    necessary, **and for controlling said means for receiving to receive by said content**

    data from the external apparatus via the network when said content data is not

    stored in said means for storing, at least by (col. 4 lines 32-37) Craig discloses "if the

    web page is not dynamically generated and the web page does not exist in cache, control

    continues from step 208 to step 216. In step 216, control retrieves the requested web page

from the web server 14 using the URL." Where if the page does not exit in the cache, (the

cache is claimed means for storing) the page is retrieved from the web server using the

URL with is the external apparatus via the network claimed.

As per claim 2, claim 14 is incorporated and further Craig discloses:

-   **wherein said controller stores in said memory the content data corresponding to the**

    content data acquisition request included in said page information, at least by (Fig. 6

    ref 600) and further (Fig. 4 ref 430) is claimed memory.

Claim 12 is an information reproduction method corresponding to the apparatus claim 1, and is

rejected under the same reason set forth in connection to rejection of claim 1 above.

Claim 13 is a program product claim corresponding to the apparatus claim 1, and is rejected

under the same reason set forth in connection to rejection of claim 1 above. Where **Craig** further

discloses the program product stored upon a computer readable medium to be processed, at least

by (Claim 35).

Claim 14 is an information reproduction apparatus corresponding to the apparatus claim 1, and

is rejected under the same reason set forth in connection to rejection of claim 1 above. Where

Craig further discloses the apparatus as (Fig. 1 and Fig. 2) which is used to provide the means

that has been disclosed in claim 1.

As per claim 11, claim 14 is incorporated and further Craig fails to specifically disclose:

-   **wherein: the page information received by said receiver includes said content data**

    acquisition request and Uniform Resource Locator (URL), at least by (Fig. 4 Ref.

    405) it should be understood the an HTTP req includes a url. And at least by (col. 11

    lines 17-21) where it is disclosed that the received request via HTTP is forwarded to a

web application server that supports JSPs and servlets, then the "request is then passed to

a servlet 420 corresponding to the invoked JSP, where this servlet 420 uses a bean 425",

where the bean is the content data being requested.

-     **and said controller accesses, when the content data corresponding to said content**

data acquisition request is not stored in said memory, said URL to acquire said

content data from said external apparatus, at least by (Fig. 7 Ref 715 and 725) shows

the instance where the bean is not cached the "CS returns NULL to EM" which lead to

the determination of caching in (Fig.9).

Claim Rejections - 35 USC § 103

10.   The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all

obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in
> section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are
> such that the subject matter as a whole would have been obvious at the time the invention was made to a person
> having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the
> manner in which the invention was made.

11.   Claims 3- 10 rejected under 35 U.S.C. 103(a) as being unpatentable over **Craig** in view

of Tso et al. (US 681298 B1) (herein referenced as **Tso**).

As per claim 3, claim 2 is incorporated and further Craig fails to specifically disclose:

-     **wherein said controller stores in said memory an image data associated with page**

information of a portal site.

However, **Tso** teaches the above limitations at least by (col. 3 lines 62-63), as "Cache items

include web pages or HTML documents that include HTML text plus **images,** audio."

Therefore it would have been obvious to one of the ordinary skill in the art at the time of the

invention made to incorporate the teaching of Tso into the teaching of **Craig** because one of the

ordinary skill in the art would have been motivated to use such a modification for the purpose of

being able to cache media that requires more bandwidth and resources for improved browsing

and accessibility.

As per claim 4, claim 2 is incorporated and further Craig fails to specifically disclose:

-    **wherein said controller stores in said memory a sound data associated with page**
     information of a portal site.

However, **Tso** teaches the above limitations at least by (col. 3 lines 62-63), as "Cache items

include web pages or HTML documents that include HTML text plus images, **audio**."

Therefore it would have been obvious to one of the ordinary skill in the art at the time of the

invention made to incorporate the teaching of **Tso** into the teaching of **Craig** because one of the

ordinary skill in the art would have been motivated to use such a modification for the purpose of

being able to cache media that requires more bandwidth and resources for improved browsing

and accessibility.

As per claim 5, claim 14 is incorporated and further Craig fails to specifically disclose:

-    **wherein said controller stores in said memory the content data that has been**
     accessed more than a certain number of times.

However, **Tso** teaches the above limitations at least by (Fig. 7A, Ref. 410) shows the cache

with a count of number "times used."

Therefore it would have been obvious to one of the ordinary skill in the art at the time of the

invention made to incorporate the teaching of **Tso** into the teaching of **Craig** because one of the

ordinary skill in the art would have been motivated to use such a modification for the purpose of

filtering out the least viewed content to optimize the usage of memory and resources.

As per claim 6, claim 14 is incorporated and further Craig fails to specifically disclose:

- **wherein said controller removes from said storage means memory the content data that has been infrequently accessed.**

However, **Tso** teaches the above limitations at least by (col. 5 lines 4-8), as "control deletes the web page with the lowest removal factor and returns to step 252. Control also preferably removes web pages that were preloaded when the deleted web page was initially loaded."

Therefore it would have been obvious to one of the ordinary skill in the art at the time of the invention made to incorporate the teaching of **Tso** into the teaching of **Craig** because one of the ordinary skill in the art would have been motivated to use such a modification for the purpose of filtering out the least viewed content to optimize the usage of memory and resources.

As per claim 7, claim 6 is incorporated and further Craig fails to specifically disclose:

- **wherein said controller registers in said memory an indicator showing importance of said content data along with said content data, and prevents said content data from being removed based on said indicator of said content data regardless of a frequency of playback access of said content data.**

However, **Tso** teaches the above limitations at least by (col. 5 lines 4-5) as "control deletes the web page with the lowest removal factor and returns to step 252" where removal factor is based on (col. 7 lines 65 – col. 8 lines 3) "function F that depends on one or more of the usage and/or data type factors for each cache item" where because the removal factor is based on one or more of the usage and/or data type the removal of the item can be prevented regardless of the frequency of the page accessed.

Therefore it would have been obvious to one of the ordinary skill in the art at the time of the invention made to incorporate the teaching of **Tso** into the teaching of **Craig** because one of the ordinary skill in the art would have been motivated to use such a modification for the purpose of allowing the ability to define a preference in what the user wants cached which allows more freedom and customization in how the memory and resources should be used.

As per claim 8, claim 14 is incorporated and further Craig fails to specifically disclose:

- **wherein, when said controller receives compressed content data from said external apparatus, said controller registers in said memory said content data in uncompressed format.**

However, **Tso** teaches the above limitations at least by (col. 6 lines 23-24), as "indicates whether the cache item is compressed ("C") or decompressed ("D")," which shows that both compress and uncompressed data can be stored.

Therefore it would have been obvious to one of the ordinary skill in the art at the time of the invention made to incorporate the teaching of **Tso** into the teaching of **Craig** because one of the ordinary skill in the art would have been motivated to use such a modification for the purpose of storing the content is its original form which then improves the content retrieval time.

As per claim 9, claim 8 is incorporated and further Craig fails to specifically disclose:

- **wherein, when said controller receives the compressed content data with a certain attribute, said controller registers in said means memory said content data in uncompressed format.**

However, **Tso** teaches the above limitations at least by (col. 6 lines 23-24), as "indicates whether the cache item is compressed ("C") or decompressed ("D")," where ("C") and ("D") are claimed attribute.

Therefore it would have been obvious to one of the ordinary skill in the art at the time of the invention made to incorporate the teaching of **Tso** into the teaching of **Craig** because one of the ordinary skill in the art would have been motivated to use such a modification for the purpose of storing the content is its original form which then improves the content retrieval time.

As per claim 10, claim 14 is incorporated and further Craig fails to specifically disclose:

- **wherein: said receiver includes a content reproduction unit configured to reproduce the content data received; and said controller converts the content data received from said external apparatus into a compression format corresponding to characteristics of said content reproduction means unit, and then stores said content data in said memory.**

However, **Tso** teaches the above limitations at least by (col. 4 lines 29), as "control continues with step 212. Control outputs the web page to the display 30 and continues with step 204" and (col. 4 lines 44-45) as ," control stores the web page in cache and outputs the web page to the display 30 in step 256" show reproducing stored content and (col. 6 lines 23-24), as "indicates whether the cache item is compressed ("C") or decompressed ("D") show the ability to reproduce compressed data.

Therefore it would have been obvious to one of the ordinary skill in the art at the time of the invention made to incorporate the teaching of **Tso** into the teaching of **Craig** because one of the

ordinary skill in the art would have been motivated to use such a modification for the purpose of

optimizing the storage space by storing the compressed data.

Conclusion

12.   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to DENNIS TRUONG whose telephone number is (571)270-3157.

The examiner can normally be reached on MON - FRI: 7:30 - 5:00 PM EST.

        If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Mahmoudi Tony can be reached on (571) 272-4078. The fax phone number for the

organization where this application or proceeding is assigned is 571-273-8300.

        Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published applications

may be obtained from either Private PAIR or Public PAIR. Status information for unpublished

applications is available through Private PAIR only. For more information about the PAIR

system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR

system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would

like assistance from a USPTO Customer Service Representative or access to the automated

information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Dennis Truong/
Examiner, Art Unit 2169

/Tony Mahmoudi/
Supervisory Patent Examiner, Art Unit 2169